



A publication of the U.S. Department of Energy Carlsbad Field Office

May 2013

WIPP Quick Facts (As of 5-22-13)

11,303

Shipments received since opening (10,644 CH and 659 RH)

86,734

Cubic meters of waste disposed (86,405 CH and 329 RH)

166,819

Containers disposed in the underground (166,162 CH and 657 RH)

CBFO manager's employee meetings at 2,150 feet deep



WIPP recognized with Green Zia Award for environmental excellence



The U.S. Department of Energy's (DOE) Waste Isolation Pilot Plant (WIPP) was recognized by the New Mexico Environment Department (NMED) with Green Zia Environmental Leadership Program (GZELP) Gold Level membership for excellence.

The GZELP annually recognizes organizations and businesses for their demonstration of environmental leadership in support of pollution prevention and sustainability. The Gold Level is the highest GZELP recognition. WIPP was chosen by the NMED as a Silver Level Leader in 2012 and Bronze Level Leader in 2011.

The NMED, the state regulatory agency, selected WIPP based on continuing environmental achievements, including hazardous waste reduction, energy conservation and pollution prevention.

"We're honored to be recognized by NMED for environmental practices at WIPP, said DOE Carlsbad Field Office (CBFO) Manager Joe Franco. The CBFO has responsibility for WIPP and the National Transuranic (TRU) Program. "WIPP is committed to protecting the environment and conserving natural resources so they're available for use by future generations. Credit goes to the WIPP team which is very deserving of this recognition."

NMED Secretary Ryan Flynn and New Mexico Energy, Minerals and Natural Resources Department Secretary F. David Martin presented the Gold Level Leader recognition to members of the WIPP team at a ceremony in Carlsbad on April 25, 2013 (see photo above). Secretary Flynn congratulated employees for their commitment to the environment and commended WIPP for improvements to recycling programs and reduced use of water, electricity and petroleum products.



Carlsbad Field Office Manager Joe Franco is quite comfortable going from the office environment to the underground mine. Not only does he maintain his qualifications for unescorted access to the WIPP underground, but he also recently held two sessions of employee meetings there.

WIPP is one of only three New Mexico organizations to achieve Gold Level status in 2013 for its documented improvements and associated cost savings for the period of October 2011 through December 2012. The organizations that were recognized have shown commitment to and innovation for reducing waste and natural resource use in New Mexico, according to the NMED.

The WIPP Team Program Leader Susan McCauslin, CBFO National Environmental Policy Act compliance manager, said it takes a team effort to achieve Gold Level status. "We consistently review new projects and work packages to identify ways to conserve resources. Can we use recycled materials? Save water or fuel? It's a systematic process that requires everyone's participation if we are to improve."

In addition to McCauslin, Franco and Farok Sharif, president and project manager of Nuclear Waste Partnership (NWP), LLC, the WIPP management and operating contractor, those recognized from the CBFO, NWP, LLC, Regulatory Environmental Services (RES), NWP, LLC affiliate, and Xcel Staffing Companies included: Royce Allen, Joe Arrey, Joe Baca, George Basabilvazo, Billy Beeman, Randy Britain, Roy Byrd, Jason Sedgwick, James Cobb, Francine Cohen, Curtis Cox, Shari Cullum, Joel Frier, Marty Gonzales, James Hedin, Jennifer Hendrickson, Bruce Jeffress, Richard Jimenez, Lynn Johnson, Stewart Jones, Cliff Kemp, Kendra Kessler, Red Keyser, Johnny Marrs, Judy McLemore, Helen Moore, Brian Navarrete, Jeff Neatherlin, Jimmy Neatherlin, Jamie Newton, Doug Pitzer, Butch Reid, Bobby Roberson, Rick Salness, Robbin Spoon, and Kenny Walker.

The GZELP is modeled after the Malcolm Baldrige Performance Excellence Program with emphasis on integrating environmental improvements into core business practices. Participating organizations and businesses that implement sustainable practices complete a GZELP application each year to document environmental achievements and set future goals. Since its inception in 1999, over 140 organizations and businesses have participated in the program.

WIPP Quarterly Meeting recently held in Carlsbad



The 122nd WIPP Quarterly Technical Meeting was held on April 25, 2013 in Carlsbad, N.M. General monitoring, the WIPP Hazardous Waste Facility Permit and other topics were discussed. Pictured above are Carlsbad Field Office Director of Regulatory Compliance George Basabilvazo, New Mexico Enviornment Department (NMED) Hazardous Waste Bureau WIPP Program Manager Trais Kliphuis, Eletha

Senator Heinrich visits WIPP



U.S. Senator Martin Heinrich recently visited the Waste Isolation Pilot Plant. Senator Heinrich previously served as a congressman from northern New Mexico and won his seat in the U.S. Senate in November 2012. Above, Carlsbad Field Office Manager Joe Franco discusses the

Trujillo from the New Mexico Energy, Minerals and Natural Resources Department and Susan Lucas Kamat from the NMED WIPP Oversight Bureau.

project with Heinrich's Chief of Staff Steve Haro and Senator Heinrich. Also shown are Randy Britain and John VandeKraats of Nuclear Waste Partnership, the WIPP management and operating contractor.

Travel Channel films at WIPP



On May 14, the Travel Channel was on site to film a segment about the Waste Isolation Pilot Plant (WIPP). Stanley Brown, researcher and producer with Indigo Films, Los Angeles, CA, requested access to WIPP's surface and underground facilities to obtain footage for a possible new series on the network. The show's host, Cara Santa Maria and a film crew were granted permission on site for the filming.

The purpose of the series would be to spotlight interesting parts of the country that may not be well known. The segment is expected to focus on the unique location and basic operations of the WIPP facility and is designed to be an informative and entertaining glimpse into rarely seen places and facilities within the U.S. The show is expected to air toward the end of the year.

Above, Santa Maria interviews Carlsbad Field Office Director of Science and International Programs Roger Nelson in the WIPP underground.



WIPP salt tested by German researchers



WIPP Security Force recognized for outstanding safety

The U.S. Department of Energy (DOE) has awarded Security Walls, LLC, the Waste Isolation Pilot Plant's (WIPP) Security Protective Force, with a Star of Excellence Award in the Voluntary Protection Program (VPP) for the fifth consecutive year.

"I'm very pleased to present this recognition to the WIPP Protective Force, which is the only security force within the DOE complex to receive 'Legacy Star' status," said DOE Carlsbad Field Office (CBFO) Manager Joe Franco, who presented the award to Security Walls, LLC Manager Richard De Los Santos this week (see photo above). CBFO has responsibility for WIPP and the National Transuranic (TRU) Program.

"They can be very proud of this accomplishment and the close attention to detail it takes to achieve it," Franco said. "It shows a strong commitment to safety and security at WIPP."

To receive a Star of Excellence Award, an organization must achieve an injury rate 75 percent below the industry average. Last year, after maintaining that average for four consecutive years, Security Walls, LLC was awarded the Legacy of Stars Award. This year's Star of Excellence Award builds on that record of safety. In addition, the WIPP Security Protective Force has marked more than five years without a recordable injury.

De Los Santos accepted the award on behalf of Security Walls, LLC, which is part of Nuclear Waste Partnership, LLC's, the WIPP management and operating contractor, team for the WIPP facility. "The men and women in uniform are the ones who made this happen," De Los Santos said. "They are the ones with their feet on the ground, who do the work, face risks and deliver."

The VPP program promotes safety and health excellence through cooperative efforts among labor, management and government at DOE contractor sites. Star status is the highest level that can be achieved and is reserved for companies that demonstrate outstanding



Shipments of WIPP salt are on their way to Germany for testing. The United States and Germany have long collaborated on salt repository research, design and operations. Recent developments in the US and Germany have reenergized efforts in salt repository investigations and related studies. The importance of the collaboration has been acknowledged by the responsible ministries and departments and underscored in 2011 by the signing of a Memorandum of Understanding between DOE's offices of Environmental Management (EM) and Nuclear Energy (NE) and the German Ministry of Economics and Technology, which is responsible for site-independent research, development and demonstration in Germany.

As part of the federal collaborations, German salt repository experts and Sandia National Laboratories are conducting benchmark evaluations of generic modeling of thermomechanical field-scale tests. The German researchers have proposed that their research groups conduct a series of geomechanical tests on WIPP salt to derive WIPP parameters for their salt models. The collaborators will then run benchmark calculations on large-scale WIPP experiments. The ultimate prospect of this work is to identify the best salt modeling capability, which could be used for design, analysis, performance assessment, and generic testing pertaining to a salt repository for heat-generating nuclear waste.

To support this international collaboration, EM and NE divisions of DOE have supported acquisition of WIPP core and its delivery to Germany. To get the program started, Sandia provided 4-inch diameter core samples from existing inventory, which was acquired about 12 years ago. This core had a Quality Assurance (QA) pedigree and was protected in vacuum sealed bags and in core boxes that were generally stored underground in the Q Room Alcove. German scientists reported receiving these core samples beginning in December 2012 and early in 2013. However, the testing matrix proposed by the Germans involved approximately 140 laboratory experiments, requiring a much greater quantity of salt. An agreement was reached to drill large (12-inch) diameter cores, from which the Germans will prepare samples as needed. The NWP Mining and Ground Control Department performed the drilling, the NWP Hoisting Department provided the logistics from the underground, and Sandia provided the QA and shipping. The Sandia staff overseeing the extraction of core and arranging for its packaging and ultimate shipment to Germany include Michael Schuhen & Terry MacDonald, Sandia, and Phil Finley & Raul Rascon, RESPEC.

On March 22 a large shipment of clean halite core was processed through Sandia export control and shipped to the Institute for

protection of employee safety and health.

Geomechanics in Leipzig. This shipment included twenty samples (12 x 24 inches). Each piece weighed nominally 200 lbs (see photo above). Collaborations are expected to continue with German researchers through the foreseeable future. The key benefit to WIPP will be enhanced understanding and modeling capabilities.

Please send questions or comments to Michael Schuhen (mdschuh@sandia.gov).



The U.S. Department of Energy

Waste Isolation Pilot Plant

To be added to the TeamWorks update notification list or to submit comments or suggestions, please <u>click here</u> to send us an e-mail message.

To read past issues, visit the Archives page.





